WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule other than a naturally occurring chromosome comprising a sequence encoding a GRAIL protein.

2. An isolated nucleic acid molecule according to Claim 1, wherein said GRAIL protein comprises the amino acid sequence set forth in SEQ ID NO:5 or SEQ ID NO:7.

3. An isolated nucleic acid molecule according to Claim 2, wherein said nucleic acid comprises the nucleotide sequence set forth in SEQ ID NO:5 or SEQ ID NO:7; or a fragment thereof.

4. An isolated nucleic acid comprising at least 18 contiguous nucleotides of the sequence of SEQ ID NO:5 or SEQ ID NO:7.

5. An isolated nucleic acid comprising at least 50 contiguous nucleotides of the sequence of SEQ ID NO:5 or SEQ ID NO:7.

6. An isolated nucleic acid that hybridizes under stringent conditions to the nucleic acid sequence of SEQ ID NO:5 or SEQ ID NO:7.

7. An expression cassette comprising a transcriptional initiation region functional in an expression host, a nucleic acid having a sequence of the isolated nucleic acid according to Claim 1 under the transcriptional regulation of said transcriptional initiation region, and a transcriptional termination region functional in said expression host.

8. A cell comprising an expression cassette according to Claim 7 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell, and the cellular progeny of said host cell.

9. A cell comprising a nucleic acid according to Claim 1 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell, and the cellular progeny of said host cell.

10. A method for producing GRAIL protein, said method comprising: growing a cell according to Claim 8, whereby said GRAIL protein is expressed; and isolating said GRAIL protein free of other proteins.

11. A purified polypeptide composition comprising at least 50 weight % of the protein present as a GRAIL protein.

12. A purified polypeptide according to Claim 11, wherein said polypeptide comprises the amino acid sequence encoded by SEQ ID NO:5 or SEQ ID NO:7.

13. A purified polypeptide fragment of at least 12 amino acids, and comprising a sequence within SEQ ID NO:6 or SEQ ID NO:8.

14. An antibody specific for the polypeptide of Claim 11.

15. A method of screening for biologically active agents that modulate GRAIL function, the method comprising:

combining a candidate biologically active agent with any one of:

(a) a GRAIL polypeptide or fusion derived therefrom;

(b) a cell comprising a nucleic acid encoding a GRAIL polypeptide; or

(c) a non-human transgenic animal model for GRAIL gene function comprising one of: (i) a knockout of an GRAIL gene; (ii) an exogenous and stably transmitted GRAIL gene sequence; or (iii) an GRAIL promoter sequence operably linked to a reporter gene; and

determining the effect of said agent on GRAIL function.

16. A method of characterizing the expression of sequences associated with anergy induction or maintenance in T cells, the method comprising:

contacting an array of anergy associated sequences as set forth in SEQ ID NO:1-5 and 7, with a probe derived from cells potentially involved in T cell anergy induction or maintenance.

17. A method of decreasing the responsiveness of a T cell population, the method comprising:

up-regulating GRAIL activity in said T cell population.

18. The method according to Claim 17, wherein said responsiveness comprises synthesis of IL-2 in response to antigenic stimulation.

19. The method according to Claim 17, wherein said up-regulating of GRAIL activity comprises introduction of a GRAIL coding sequence into said T cell population.